

St. Charles Community College — Missouri S&T
Education BS with Early Childhood, Elementary, or Middle School Teacher Education
 Transfer Guide Effective as of Fall 2025

Complete Group 1 - Core Requirements and Group 2 - Major Requirements for major of choice.

Group 1 - Core Requirements: All Emphasis/Focus Areas Take All Courses

Education students take all Group 1 - Core Requirements and Group 2 - Emphasis Area Requirements for major of choice.

<u>St. Charles Community College</u>			<u>Semester</u>	<u>Missouri S&T</u>		
ENG 101	English Composition I	3		ENG 1120	Exposition and Argumentation	3
ENG 102	English Composition II	3		ENG 1160	Writing and Research	3
COM 106	Public Speaking	3		SP&MS 1185	Principles of Speech	3
PHL 101 or	Intro to Philosophy or			PHILOS 1105 or	Self and World: Intro to Philosophy or	
PHL 102	Intro to Logic	3		PHILOS 1115	Logic and Reasoning: An Introduction	3
POL 101	American Government	3		POL SCI 1200	American Government	3
EDU 212	Foundations of Education in a Diverse Society	3		EDUC 1074	Education in a Diverse Society	3
EDU 285	Teaching Profession with Field Experience	3		EDUC 1104	Teacher Field Experience I	1
EDU 240	Educational Psychology	3		EDUC 2102 or	Educational Psychology	
PSY 110	Human Growth and Development	3		PSYCH 2300	Educational Psychology	3
EDU 250	Education of Exceptional Learners	3		PSYCH 3310	Developmental Psychology	3
				EDUC 2310 or	Education of the Exceptional Child or	
				PSYCH 4310	Psychology of the Exceptional Child	3
		Total Hours	30			Total Hours
						28

**Group 2 - Emphasis/Focus Area Requirements:
Take All Courses for Emphasis/Focus of Choice**

Middle School Teacher Education students take all Group 1 - Core Requirements (above) and Group 2 - Emphasis Area Requirements for chosen emphasis area from list below. See course requirements on following pages.

Early Childhood
Elementary Education STEM Focus
Middle School English Emphasis
Middle School Mathematics Emphasis
Middle School Science Emphasis
Middle School Social Sciences Emphasis

Middle School Teacher Education Emphasis Area Requirements are detailed on the following pages.

Humanities/Social Science (HSS) Electives: HSS electives may include any history, economics, political science, sociology, psychology, philosophy, fine art, literature, or foreign language. Missouri S&T approved HSS courses are listed at ugs.mst.edu. Your campus may have additional acceptable options. Consult with your advisor or email transfer@mst.edu with questions.

Early Childhood

St. Charles Community College

Semester

Missouri S&T

Degree Requirements

It is recommended that AAT-track students prioritize coursework in this section and the Group 1 - Core Requirements section before completing any courses from the Additional Degree Requirements section. Students should consult closely with their community college/transfer school advisor to select coursework to total no more than the maximum of 61 transferable credits.

BIO 105, 106 or BIO 150	Essentials of Biology and Lab (4) or General Biology: Cells to Organisms (5)	4	BIO SCI 1113, 1219 or BIO SCI 1213*, 1219	General Biology and Lab or Principles of Biology* and Lab <small>*Will be substituted for BIO SCI 1113.</small>	4
CHM 115 or PHY 125	General Chemistry I (5) or Intro to Physical Geology (3)	3	CHEM 1310, 1319 or GEOLOGY 1110	General Chemistry I and Lab (5) or Physical and Environmental Geology (3) <small>Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit. Department will substitute CHEM 1310, 1319 or GEOLOGY 1120 for this requirement.</small>	3
MAT 121 or MAT 158	Intermediate Algebra or College Algebra or higher math	4	MATH 1103 or MATH 1140	Fundamentals of Algebra or College Algebra or higher math <small>Department will substitute MATH 1103 for MATH 1140.</small>	3
PHY 150 or PHY 130	General Physics I or Astronomy	3	PHYSICS 1145 or PHYSICS 1505	College Physics I (4) or Astronomy (3) <small>Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit.</small>	3
GEO 110	Geography for Educators	3	HISTORY 2110	World Regional Geography	3
HIS 101 or HIS 102 or HIS 145 or HIS 146	US History to 1877 or US History Since 1877 or Western Civ: Ancient and Medieval Heritage or Western Civ: Modern European Heritage		HISTORY 1300 or HISTORY 1310 or HISTORY 1100* or HISTORY 1200* or	American History to 1877 or American History since 1877 or Early Western Civilization or Modern Western Civilization or <small>*Department will substitute HISTORY 1100 or 1200 for this requirement.</small>	3
EDU 225	Literature for Children	3	EDUC 3430 or ENGLISH 2240	Diverse Literature for Children or Children's Literature	3
Literature	Literature Elective	3	Literature	Literature Elective	3
PSY 101	Intro to Psychology	3	PSYCH 1101	General Psychology	3
			ART 1180 or MUSIC 1150	Art Appreciation or Music Understanding and Appreciation	3

Additional Degree Requirements

It is recommended that AAS or Certificate Program students who have completed the coursework below work closely with their community college/transfer school advisor to complete selected courses from the Recommended Transfer Coursework section and the Group 1 - Core Requirements section to total no more than the maximum of 61 transferable credits.

EDU 208	Nutrition, Health, & Safety of Children	3	EDUC 1221	Health, Nutrition, and Safety in Early Childhood Education	3
EDU 205	Children, Families & Communities	3	EDUC 2401	School, Family, and Community Partnerships	3
	Group 2 Emphasis/Focus Area Requirements	31		Group 2 Emphasis/Focus Area Requirements	33
	Group 1 Core Requirements	30		Group 1 Core Requirements	28
	Total Hours	61		Total Hours*	61

*S&T advisor permission is required to transfer more than 61 credits toward the S&T degree for Early Childhood Emphasis Area.

Professional Requirements for Teacher Education Program: Please view all Professional Standing and Curriculum requirements at <https://teachereducation.mst.edu/earlychildhood/>.

Elementary Education STEM Focus	
<p>1. Science: Understanding basic scientific concepts, the scientific method, and the relationship between science and technology.</p> <p>2. Mathematics: Developing foundational math skills, including addition, subtraction, multiplication, and division, and understanding fractions and decimals.</p> <p>3. Engineering: Introducing basic engineering concepts, such as design, problem-solving, and the use of simple machines.</p> <p>4. Technology: Exploring basic computer skills, internet safety, and the use of digital tools for learning.</p>	<p>1. Science: Understanding basic scientific concepts, the scientific method, and the relationship between science and technology.</p> <p>2. Mathematics: Developing foundational math skills, including addition, subtraction, multiplication, and division, and understanding fractions and decimals.</p> <p>3. Engineering: Introducing basic engineering concepts, such as design, problem-solving, and the use of simple machines.</p> <p>4. Technology: Exploring basic computer skills, internet safety, and the use of digital tools for learning.</p>

St. Charles Community College			Semester	Missouri S&T	
BIO 105, 106 or BIO 150	Essentials of Biology and Lab (4) or General Biology: Cells to Organisms (5)	4	BIO SCI 1113, 1219 or BIO SCI 1213*, 1219	General Biology and Lab or Principles of Biology* and Lab *Will be substituted for BIO SCI 1113.	4
BIO 151	General Biology: Organisms to Environment	5	BIO SCI 1223, 1229	Biodiversity and Lab	4
CHM 115 or PHY 125	General Chemistry I (5) or Intro to Physical Geology (3)	3	CHEM 1310, 1319 or GEOLOGY 1110	General Chemistry I and Lab (5) or Physical and Environmental Geology (3) Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit. Department will substitute CHEM 1310, 1319 or GEOLOGY 1120 for this requirement.	3
MAT 121 or MAT 158	Intermediate Algebra or College Algebra or higher math	4	MATH 1103 or MATH 1140	Fundamentals of Algebra or College Algebra or higher math Department will substitute MATH 1103 for MATH 1140.	3
PHY 150 or PHY 130	General Physics I or Astronomy	3	PHYSICS 1145* or PHYSICS 1505	College Physics I (4) or Astronomy (3) Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit.	3
GEO 110	Geography for Educators	3	HISTORY 2110	World Regional Geography	3
HIS 145	Western Civ: Ancient and Medieval Heritage	3	HISTORY 1100	Early Western Civilization	3
HIS 146	Western Civ: Modern European Heritage	3	HISTORY 1200	Modern Western Civilization	3
HIS 101 or HIS 102	US History to 1877 or US History Since 1877	3	HISTORY 1300 or HISTORY 1310	American History to 1877 or American History since 1877	3
ECO 120 or ECO 110	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
EDU 225	Literature for Children	3	EDUC 3430 or ENGLISH 2240	Diverse Literature for Children or Children's Literature	3
PSY 101	Intro to Psychology	3	PSYCH 1101	General Psychology	3
ART 1001 or MUS 111	Art Appreciation or Music Appreciation	3	ART 1180 or MUSIC 1150	Art Appreciation or Music Understanding and Appreciation	3
	Group 2 Emphasis/Focus Area Requirements	43		Group 2 Emphasis/Focus Area Requirements	41
	Group 1 Core Requirements	30		Group 1 Core Requirements	28
	Total Hours	73		Total Hours*	69
*S&T advisor permission is required to transfer more than 63 credits toward the S&T degree for the Elementary Emphasis Area.					
Professional Requirements for Teacher Education Program: Please view all Professional Standing and Curriculum requirements at https://teachereducation.mst.edu/elementaryeducation/ .					

Middle School Language Arts Emphasis Area

St. Charles Community College		Semester	Missouri S&T		
MAT 121 or MAT 158	Intermediate Algebra or College Algebra	4	MATH 1103 or MATH 1140	Fundamentals of Algebra or College Algebra	3
BIO 105, 106 or BIO 150	Essentials of Biology and Lab (4) or General Biology: Cells to Organisms (5)	4	BIO SCI 1113, 1219 or BIO SCI 1213*, 1219	General Biology and Lab or Principles of Biology* and Lab <small>*Will be substituted for BIO SCI 1113.</small>	4
PHY 125or PHY 130 or CHM 115	Intro to Physical Geology (3) or Astronomy (3) or General Chemistry I (5)	3	GEOLOGY 1110 or PHYSICS 1505 or CHEM 1310	Physical and Environmental Geology (3) or Evolution of the Earth (3) or Introductory Astronomy (3) or General Chemistry (4) <small>Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit.</small>	3
CPT 135 or CPT 185 or CPT 189 or CPT 182	Computer Science I with Python (4) or C# Programming (3) or Computer Science II with Java (3) or Computer Science II with C++ (3)	3	CS 1500 or CS 1500 or CS 1500 or CS 1570*	Computational Problem Solving or Computational Problem Solving or Computational Problem Solving or Intro to Programming (C++)* <small>*Department will substitute for this requirement.</small>	3
ART 1001 or MUS 111 or THE 122	Art Appreciation or Music Appreciation or Intro of Theatre	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Understanding and Appreciation or Theatre via Video	3
HIS 145 or HIS 146 or HIS 101 or HIS 102	Western Civ: Ancient and Medieval Heritage or Western Civ: Modern European Heritage or US History to 1877 or US History Since 1877	3	HISTORY 1100 or HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Early Western Civilization or Modern Western Civilization or American History to 1877 or American History since 1877	3
ECO 120 or ECO 110	Principles of Microeconomics or Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Literature	Literature Elective	3	Literature	Literature Elective	3
UL Literature	Upper Level Literature Elective	3	UL Literature	Upper Level Literature Elective	3
Humanities	Any philosophy, fine art, literature, foreign language	3	Humanities	Any philosophy, fine art, literature, foreign language	3
	Group 2 Emphasis/Focus Area Requirements	32		Group 2 Emphasis/Focus Area Requirements	31
	Group 1 Core Requirements	30		Group 1 Core Requirements	28
	Total Hours	62		Total Hours*	59
			<small>*S&T advisor permission is required to transfer more than 62 credits toward the S&T degree for Middle School English Emphasis Area.</small>		
Professional Requirements for Teacher Education Program: Please view all program requirements at https://teachereducation.mst.edu/middleschool/ .					

Professional Requirements for Teacher Education Program: Please view all program requirements at <https://teachereducation.mst.edu/middleschool/>.

Middle School Mathematics Emphasis Area

St. Charles Community College			Semester	Missouri S&T		
BIO 105, 106 or BIO 150	Essentials of Biology and Lab (4) or General Biology: Cells to Organisms (5)	4	BIO SCI 1113, 1219 or BIO SCI 1213*, 1219	General Biology and Lab or Principles of Biology* and Lab *Will be substituted for BIO SCI 1113.	4	
PHY 125	Intro to Physical Geology	3	GEOLOGY 1110	Physical and Environmental Geology	3	
PHY 130 or PHY 150 or CHM 115	Astronomy (3) or General Physics I (3) or General Chemistry I (5)	3	PHYSICS 1505 or PHYSICS 1145 or CHEM 1310	Introductory Astronomy (3) or College Physics I (4) or General Chemistry I (3) Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit.	3	
MAT 121	Intermediate Algebra	4	MATH 1103	Fundamentals of Algebra	3	
MAT 158	College Algebra	4	MATH 1140	College Algebra	3	
MAT 180	Calculus and Analytic Geometry I	5	MATH 1214	Calculus I	4	
MAT 230 or MAT 210	Calculus and Analytic Geometry II (5) or Survey Calculus (4)	4	MATH 1215 or MATH 1212	Calculus II (4) or Survey of Calculus (4)	4	
CPT 135 or CPT 185 or CPT 189 or CPT 182	Computer Science I with Python (4) or C# Programming (3) or Computer Science II with Java (3) or Computer Science II with C++ (3)	3	CS 1500 or CS 1500 or CS 1500 or CS 1570*	Computational Problem Solving or Computational Problem Solving or Computational Problem Solving or Intro to Programming (C++)* *Department will substitute for this requirement.	3	
MAT 157 or MAT 175	College Statistics-General Education or Introductory Statistics	3	STAT 1115	Statistics for the Social Sciences I	3	
ART 1001 or MUS 111 or THE 122	Art Appreciation or Music Appreciation or Intro of Theatre	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Understanding and Appreciation or Theatre via Video	3	
HIS 145 or HIS 146 or HIS 101 or HIS 102	Western Civ: Ancient and Medieval Heritage or Western Civ: Modern European Heritage or US History to 1877 or US History Since 1877	3	HISTORY 1100 or HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Early Western Civilization or Modern Western Civilization or American History to 1877 or American History since 1877	3	
ECO 120 or ECO 110	Principles of Microeconomics or Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3	
Humanities	Any philosophy, fine art, literature, foreign language	3	Humanities	Any philosophy, fine art, literature, foreign language	3	
	Group 2 Emphasis/Focus Area Requirements	45		Group 2 Emphasis/Focus Area Requirements	42	
	Group 1 Core Requirements	30		Group 1 Core Requirements	28	
	Total Hours	75		Total Hours*	70	
*S&T advisor permission is required to transfer more than 60 credits toward the S&T degree for Middle School Math Emphasis Area.						
Professional Requirements for Teacher Education Program: Please view all program requirements at https://teachereducation.mst.edu/middleschool/ .						

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Middle School Science Emphasis Area

St. Charles Community College			Semester	Missouri S&T	
BIO 105, 106 or BIO 150	Essentials of Biology and Lab (4) or General Biology: Cells to Organisms (5)	4	BIO SCI 1113, 1219 or BIO SCI 1213, 1219	General Biology and Lab or Principles of Biology and Lab	4
BIO 122	Environmental Science	3	BIO SCI 1173	Intro to Environmental Sciences	3
PHY 125	Intro to Physical Geology	3	GEOLOGY 1110	Physical and Environmental Geology	3
PHY 130 or PHY 150	Astronomy or General Physics I	3	PHYSICS 1505 or PHYSICS 1145	Introductory Astronomy (3) or College Physics I (4) Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit.	3
			CHEM 1310, 1319	General Chemistry I and Lab	5
MAT 121 or MAT 158	Intermediate Algebra or College Algebra	4	MATH 1103 or MATH 1140	Fundamentals of Algebra or College Algebra	3
MAT 157 or MAT 175	College Statistics-General Education or Introductory Statistics	3	STAT 1115	Statistics for the Social Sciences I	3
ART 1001 or MUS 111 or THE 122	Art Appreciation or Music Appreciation or Intro of Theatre	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Understanding and Appreciation or Theatre via Video	3
HIS 145 or HIS 146 or HIS 101 or HIS 102	Western Civ: Ancient and Midieval Heritage or Western Civ: Modern European Heritage or US History to 1877 or US History Since 1877	3	HISTORY 1100 or HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Early Western Civilization or Modern Western Civilization or American History to 1877 or American History since 1877	3
ECO 120 or ECO 110	Principles of Microeconomics or Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Humanities	Any philosophy, fine art, literature, foreign language	3	Humanities	Any philosophy, fine art, literature, foreign language	3
	Group 2 Emphasis/Focus Area Requirements	32		Group 2 Emphasis/Focus Area Requirements	36
	Group 1 Core Requirements	30		Group 1 Core Requirements	28
	Total Hours	62		Total Hours*	64
*S&T advisor permission is required to transfer more than 61 credits toward the S&T degree for Middle School Science Emphasis Area.					
Professional Requirements for Teacher Education Program: Please view all program requirements at https://teachereducation.mst.edu/middleschool/ .					

Professional Requirements for Teacher Education Program: Please view all program requirements at <https://teachereducation.mst.edu/middleschool/>.

Middle School Social Sciences Emphasis Area

<u>St. Charles Community College</u>			<u>Semester</u>	<u>Missouri S&T</u>	
BIO 105, 106 or BIO 150	Essentials of Biology and Lab (4) or General Biology: Cells to Organisms (5)	4	BIO SCI 1113, 1219 or BIO SCI 1213*, 1219	General Biology and Lab or Principles of Biology* and Lab *Will be substituted for BIO SCI 1113.	4
PHY 125 or PHY 130 or PHY 150 or CHM 115	Intro to Physical Geology (3) or Astronomy (3) or General Physics I (3) or General Chemistry I (5)	3	GEOLOGY 1110 or PHYSICS 1505 or PHYSICS 1145 or CHEM 1310	Physical and Environmental Geology (3) or Introductory Astronomy (3) or College Physics I (4) or General Chemistry (4) Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit.	3
MAT 121 or MAT 158	Intermediate Algebra or College Algebra	4	MATH 1103 or MATH 1140	Fundamentals of Algebra or College Algebra	3
CPT 135 or CPT 185 or CPT 189 or CPT 182	Computer Science I with Python (4) or C# Programming (3) or Computer Science II with Java (3) or Computer Science II with C++ (3)	3	CS 1500 or CS 1500 or CS 1500 or CS 1570*	Computational Problem Solving or Computational Problem Solving or Computational Problem Solving or Intro to Programming (C++)* *Department will substitute for this requirement.	3
GEO 110	Geography for Educators	3	HISTORY 2110	World Regional Geography	3
HIS 145 or HIS 146	Western Civ: Ancient and Medieval Heritage or Western Civ: Modern European Heritage	3	HISTORY 1100 or HISTORY 1200	Early Western Civilization or Modern Western Civilization	3
HIS 101 or HIS 102	US History to 1877 or US History Since 1877	3	HISTORY 1300 or HISTORY 1310	American History to 1877 or American History since 1877	3
ART 1001 or MUS 111 or THE 122	Art Appreciation or Music Appreciation or Intro of Theatre	3	ART 1180 or MUSIC 1150 or THEATRE 1190	Art Appreciation or Music Understanding and Appreciation or Theatre via Video	3
ECO 120 or ECO 110	Principles of Microeconomics or Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Humanities	Any philosophy, fine art, literature, foreign language	3	Humanities	Any philosophy, fine art, literature, foreign language	3
	Group 2 Emphasis/Focus Area Requirements	32		Group 2 Emphasis/Focus Area Requirements	31
	Group 1 Core Requirements	30		Group 1 Core Requirements	28
	Total Hours	62		Total Hours*	59
*S&T advisor permission is required to transfer more than 62 credits toward the S&T degree for Middle School Social Sciences Emphasis Area.					